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Performance of Selected SWIs for Multiple Use in Insiza district, Zimbabwe

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THIS ABANDONED BOREHOLE IS CLEAR EVIDENCE OF THE LACK OF CAPACITY OF THE SWI

Key Message

The performance of boreholes, wells and small dams for multiple use in Insiza district has been evaluated. The performance was assessed in terms of its availability, capacity and end user preferences.

Summary

The objectives of the study were to investigate the performance of SWI in Insiza District through assessing the significance, benefits and socio-economic factors that have an impact on the optimum utilization of the SWI. Out of a total of 162 SWI in the four wards of Insiza District that have been studied, four types of SWI were identified, namely boreholes, wells, windmills and small dams and 30 were selected for performance assessment.

Questionnaires were administered on SWI users and key informants. Indicators used for assessing performance were availability, capacity, continuity and condition indices. The availability index in Insiza District ranges from 0.60 to 0.99; capacity index from 0.19 to 0.39; continuity index was between 0.25 and 0.88; and condition index ranged from 0.44 to 0.81.

The importance of SWI to users was found to be related to the perceived benefits from SWI; and differed from one SWI type to the other. The more the benefits derived from SWI the more the communities are willing to maintain the SWI, and the benefits vary among SWI types. Water availability is threatened mainly by reduced quantity available per capita due to dysfunctional SWI in the communities. Capacity is not sufficient to cater for all water needs in which case communities are forced to forfeit some of the water uses and/or resort to unsafe alternative water sources. Continuity of water supply is hindered by lack of appropriate management structures and financial arrangements for maintenance. SWI condition is good where there is NGO intervention in maintenance.

It was concluded that the overall performance of SWI in Insiza District is poor with capacity as a major setback. It is recommended that water availability for specific areas must be established before multiple use projects are implemented and appropriate technologies for multiple use systems should be installed in conformity with the needs and preferences of the communities. An in-depth comparative study focusing on investigation of factors affecting performance of rural water supply is recommended so that the necessary mechanisms can be developed and implemented.